



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/329,734	06/10/1999	IRVING AMES	YO999-023	8493

7590 04/30/2003

ALVIN J RIDDLES
BOX 34 CANDLEWOOD ISLE
NEW FAIRFIELD, CT 06812

EXAMINER

NGUYEN, FRANCIS N

ART UNIT	PAPER NUMBER
----------	--------------

2674

DATE MAILED: 04/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/329,734

Applicant(s)

AMES, IRVING

Examiner

FRANCIS NGUYEN

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-11, 14-17, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-11, 14-17, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 3/29/03 is entered. The rejection under 35 USC 112 is now withdrawn ; finality is withdrawn and a new ground of rejection applies as followed:

Claim Objections

2. Claims 14 , 15 and 21 are objected to because of the following informalities:
inconsistency of weight increase percentage (line 2 of claims 14-15 as opposed to line 16 of claim 16). Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-8, 10-11 , 14-15, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuhara et al. (US Patent 5,776,585).

As to claim 20, Fukuhara et al. teaches , in a manually guided pointing operation in a display interface between a computer and a manually moveable mouse input member positioned by a user, an improvement for positioning control (column 2, lines 12-16) of movement of said mouse input member on a mouse pad stationary surface (column 7, lines 66-67), of an addition in weight of said mouse input member (weight placed on mouse body 51, column 7, lines 5-13), whereby said weight addition operates to enhance a drag type frictional force component (

Art Unit: 2674

frictional force becomes larger, column 6, lines 24-26), that resists said movement of said mouse input member on said mouse pad stationary surface (column 7, lines 57-58, smoothly operated with no slippage, column 10, lines 66-67). However, Fukuhara et al. fails to expressly teach addition of a 20-50% increase in weight. Note that Fukuhara et al. teaches different values of mouse weights in Table 2 (column 7, line 32). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the apparatus of Fukuhara et al. then add any percentage of weight to said mouse input member, (since the frictional force always increases due to said addition of weight, it is a design of choice to select a given weight increase percentage) because it would allow improved controllability, as taught by Fukuhara et al. (column 2, lines 12-14, column 7, lines 66-67)

As to claim 6, the improvement of claim 20 wherein said 20-50% weight increase is in the range of 20-50 grams. Note again it is obvious to one skilled in the art to select weight increase in any range of weight since the frictional force always increases due to said addition of weight, it is a design of choice to select a specific range of 20-50 grams, because of improved controllability as taught Fukuhara et al. (column 2, lines 12-14, column 7, lines 66-67).

As to claim 7, the improvement of claim 6, wherein said 20-50 % weight increase is in the form of a localized group of metal particles positioned within a housing of said mouse. Note again it is obvious to one skilled in the art to select a specific material of weight since the frictional force always increases due to said addition of weight, it is a design of choice to select a specific material, because of improved controllability as taught by Fukuhara et al. (column 2, lines 12-14, column 7, lines 66-67).

As to claim 8, the improvement of claim 6, wherein said 20-50% weight increase is in the form

Art Unit: 2674

of a weight affixed to a housing of said mouse member. Note again it is obvious to one skilled in the art to select a specific location since the frictional force always increases due to said addition of weight to the mouse body, and it is a design of choice to select a location for added weight, because of improved controllability as taught by Fukuhara et al. (column 2, lines 12-14, column 7, lines 66-67).

As to claim 10, the improvement of claim 20 wherein said drag type frictional force component is the result of the addition of an increase in coefficient of friction of protrusions on the surface of said computer mouse that are adjacent to said computer mouse pad at the surface of said computer mouse pad (frictional force between mouse ball and mouse pad becomes larger and frictional force between the operation surface of the mouse body and the mouse pad (column 6, lines 30-34).

As to claim 11, the improvement of claim 20 wherein said drag type frictional force component is a result of at least one addition taken from the group of the addition of an about 20-50% increase to the weight of said computer mouse (weight placed on mouse body 51, column 7, lines 5-13), whereby said weight addition operates to enhance a drag type frictional force component (frictional force becomes larger, column 6, lines 24-26), that resists said movement of said mouse input member on said mouse pad stationary surface (column 7, lines 57-58, smoothly operated with no slippage, column 10, lines 66-67), Fukuhara et al. teaches different values of mouse weights in Table 2 (column 7, line 32). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the apparatus of Fukuhara et al. then add any percentage of weight to said mouse input member, (since the frictional force always increases due to said addition of weight, it is a design of choice to select a given weight

Art Unit: 2674

increase percentage) because it would allow improved controllability, as taught by Fukuhara et al. (column 2, lines 12-14, column 7, lines 66-67)

, the addition of a combination of a magnetic member positioned on the surface of said computer mouse that is adjacent to said computer mouse pad and a ferromagnetic sheet positioned in said mousepad, and an addition of an increase in coefficient of friction between protrusions on the surface of said computer mouse that is adjacent to said computer mouse pad at the surface of said computer mouse

As to claim 21, Fukuhara et al. teaches a positioning control enhancing increment, to said drag type resistance frictional force component that operates to enhance resistance to said relative movement of said mouse member over said surface of said mouse pad, said positioning control enhancing increment to said drag type resistance frictional force being the result of at least one of the addition of 20-50% of the weight of said mouse member (weight placed on mouse body 51, column 7, lines 5-13), whereby said weight addition operates to enhance a drag type frictional force component (frictional force becomes larger, column 6, lines 24-26) , that resists said movement of said mouse input member on said mouse pad stationary surface (column 7, lines 57-58, smoothly operated with no slippage, column 10, lines 66-67), Fukuhara et al. teaches different values of mouse weights in Table 2 (column 7, line 32). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the apparatus of Fukuhara et al. then add any percentage of weight to said mouse input member, (since the frictional force always increases due to said addition of weight, it is a design of choice

Art Unit: 2674

to select a given weight increase percentage) because it would allow improved controllability, as taught by Fukuhara et al. (column 2, lines 12-14, column 7, lines 66-67).

As to claim 14, the improvement of claim 21 wherein said frictional force component of said mouse in turn is the result of the addition of an about 20-50% in weight increase of said mouse and said weight increase of said mouse in turn is produced by about 20-50 grams of metal particles in the housing of said mouse. Note again it is obvious to one skilled in the art to select weight increase in any weight percentage, range of weight, any material since the frictional force always increases due to said addition of weight, (since the frictional force always increases due to said addition of weight), it is a design of choice to select a given weight increase percentage, to select a specific weight increase percentage, specific range of 20-50 grams, specific material because of improved controllability as taught Fukuhara et al. (column 2, lines 12-14, column 7, lines 66-67),

the addition of the combination of a magnetic member positioned on the surface of said mouse member adjacent to said surface of said mouse pad and a ferromagnetic sheet positioned in said mouse pad,

and,

the addition of an increase of protrusions on the surface of said mouse member that are adjacent to said mouse pad to said drag type movement resistance frictional force .

As to claim 15, the improvement of claim 21 wherein said frictional force component is the result of the addition of an about 29-50% in the weight of said mouse, and said weight increase

Art Unit: 2674

is produced by affixing to the top of the housing an element comprising one or more cloth or plastic covered metal discs totaling about 20-50 grams in weight. Note again it is obvious to one skilled in the art to select weight increase in any weight percentage, range of weight, any material, (since the frictional force always increase due to said addition of weight), it is a design of choice to select a given weight increase percentage, to select a specific weight increase percentage, specific range of 20-50 grams, specific material because of improved controllability as taught by Fukuhara et al. (column 2, lines 12-14, column 7, lines 66-67).

5. Claims 9, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuhara et al. in view of Hawley (US Patent 4,628,755).

As to claim 9, the position control improvement of claim 20, Fukuhara et al. teaches weight addition (column 7, lines 5-9) and a mouse pad 1 (figure 3) but fails to expressly teach said drag type frictional force component is the result of the addition of a combination of a magnetic member. Hawley teaches weight addition to a mouse as a pair of spaced ring magnets shown in figure 2. It would have been obvious to a person of ordinary skill in the art to utilize the apparatus of Fukuhara et al. , then substitute the weight addition to a mouse as magnets (since force of friction still increases due to addition of magnets), as taught by Hawley because it would result in thrust augmentation, augmented force in contact area , as taught by Hawley(column 6, lines 34-35, column 11, lines 54-55) and improved controllability of the mouse. This corresponds to the claimed magnetic member positioned on the surface of said computer

Art Unit: 2674

mouse that is adjacent to said computer mouse pad and a ferromagnetic sheet positioned in said mouse pad.

As to claim 16, the improvement of claim 21, wherein said frictional force component is the result of the addition of a combination of a magnetic member positioned on the surface of said mouse that is adjacent to said mouse pad and a ferromagnetic sheet positioned in said mouse pad. Fukuhara et al. teaches weight addition (column 7, lines 5-9) and a mouse pad 1 (figure 3) but fails to expressly teach said drag type frictional force component is the result of the addition of a combination of a magnetic member. Hawley teaches weight addition to a mouse as a pair of spaced ring magnets shown in figure 2. It would have been obvious to a person of ordinary skill in the art to utilize the apparatus of Fukuhara et al. , then substitute the weight addition to a mouse as magnets (since force of friction still increases due to addition of magnets), as taught by Hawley because it would result in thrust augmentation, augmented force in contact area , as taught by Hawley(column 6, lines 34-35, column 11, lines 54-55) and improved controllability of the mouse.

As to claim 17, the improvement of claim 16, wherein said magnetic member is adjustably positioned (Hawley, relocation of magnets 40/41, column 6, lines 58-59) and said mouse is positioned on rollers away from said mouse pad (Fukuhara et al. , mouse pad 1 was rotated with mouse body 51 and weight fixed to the jig 39, column 7, lines 10-11).

Response to Arguments

6. Applicant's response filed 3/29/2003 did not provide arguments. The previous rejection under 35 USC 112/second paragraph has been withdrawn. However, a new ground(s) of rejection is made .

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **FRANCIS N NGUYEN** whose telephone number is **703 308-8858**. The examiner can normally be reached during hours 8:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached at 703 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service whose telephone number is (703) 306-0377.



April 28th, 2003

FRANCIS N NGUYEN
Examiner
Art Unit 2674